ACTIVITY 59 NOTES

**Conduction =** occurs when 2 objects touch each other and energy transfers from the HOTTER one to the COLDER one.

HOT COLD

* Due to the collision of atoms and molecules where 2 objects are in contact
* Conductivity depends on the molecular structure of the material
* Materials that are good heat conductors are usually good electricity conductors

**2nd Law of Thermodynamics =** When energy transforms, not all energy is transformed into the target energy. Some amount will turn into heat.

* The transfer of energy from a warmer to a cooler area through a conductor is a consequence of the 2nd Law of Thermodynamics.

**Thermal energy is transferred from a body at a higher temperature to a body at a lower temperature and NEVER in reverse.**

* A cooler area is a place with less energy than a warmer area.
* When your hands are around an ice cube thermal energy in your hands is transferred to the ice cube.
* Your hands lost energy and become colder as a result.

Hands = thermal energy source

Ice cube = thermal energy receiver